

HORIZONTAL BORING MILL DBC 130L MACHINE SPEC. SELECTION SHEET	
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1. TRAVEL

ITEM		UNIT	SPECIFICATION	SELECTION
STROKE	X-axis	mm	4,000	DEFAULT
	Y-axis	mm	2,500	
	Z-axis	mm	2,000	
	W-axis	mm	700	
	SPINDLE NOSE TO TABLE CENTER	mm	750 ~ 2,750	
SPINDLE CENTER TO TABLE TOP		mm	0 ~ 2,500	

2. DIVIDING TABLE

ITEM		UNIT	SPECIFICATION	SELECTION			
CAPACITY	TABLE SIZE (WIDTH X LENGTH)	LOAD CAPACITY	mm, kg	1,600 x 1,800	STD.		
			mm, kg	1,800 x 2,000	OPT.		
			mm, kg	2,000 x 2,200	OPT.		
			mm, kg	1,800 x 2,000	OPT.		
			mm, kg	2,000 x 2,200	OPT.		
MAX. WORKPIECE SIZE		DIAMETER	mm	MAX. Ø2,400 [Ø3,300 ⁽¹⁾]	DEFAULT		
T-SLOT×NUMBERS		mm	24H8 x 9		DEFAULT		
EDGE LOCATOR(TABLE) ⁽¹⁾		ea	4		OPT. SELECTIVE		
MAX. ROTATING SPEED		r/min	1		DEFAULT		
LEAST COMMAND INCREMENT		deg.	0.001°				
INDEX DEGREE BY PIN		deg.	90°				
AUTOMATIC TABLE CLAMPING UNIT		-	HYDRAULIC				
B-AXIS ROTARY ENCODER		-	360°				

⁽¹⁾ : IN CASE OF THE LARGEST TABLE OPTION AS 2,000×2,200, IT WILL BE CHANGED.

3. SPINDLE HEAD

ITEM		UNIT	SPECIFICATION	SELECTION	
SPINDLE DIAMETER	mm	Ø130		DEFAULT	
	mm	Ø240			
SPINDLE DRIVE MOTOR (30 min./cont. rating)	kW	26 / 22		STD.	
	kW	30(15min.) / 22 ⁽¹⁾		OPT. SELECTIVE	
SPINDLE SPEED	r/min	2,500		DEFAULT	
NUMBER OF SPEED RANGES	-	3 STEPS			
MAX. TORQUE	N·m	3,357			
TOOL CLAMPING FORCE	N	26,460			
SPINDLE AIR PURGE	-	COLLET AIR			
TOOL SHANK	-	ISO #50 7/24 TAPER		STD.	
	-	BIG PLUS		OPT. SELECTIVE	
PULL STUD	-	MAS403-P50T-1(45°)		STD.	
	-	CAT 50 (Modified BT Type)		OPT. SELECTIVE	
	-	DIN 69872 #50		OPT.	

4. AXIS SYSTEM

ITEM		UNIT	SPECIFICATION	SELECTION
RAPID TRAVERSE	X / Y / Z / W-axis	mm/min	10,000[7,000 ⁽¹⁾] / 8,000 / 10,000 / 10,000	DEFAULT
MAX. CUTTING FEEDRATE	X / Y / Z -axis	mm/min	4,000	
BALL SCREW(DIAMETER X LEAD)	X / Y / Z / W-axis	mm	Ø80×P12 / Ø70×P12 / Ø70×P12 / Ø50×P10	
FEED MOTOR	X / Y / Z / W / B-axis	kW	AC 9.0 / 9.0 / 9.0 / 4.0 / 7.0	
AXIS GEAR BOX REDUCTION RATIO	X / Y / Z / W-axis	-	2 / 3 / 2 / 2	
	B-axis	-	1,440[1,584 ⁽¹⁾]	
FEEDBACK SYSTEM	X / Y / Z / W-axis	-	INC. PULSE CODER	
	B-axis	-	ROTARY ENCODER	
POSITIONING ACCURACY	X / Y / Z / W-axis	mm	±0.01 / FULL STROKE	
	B-axis	deg.	±15" & AT EACH 90° : ±5"	
REPEATABILITY	X / Y / Z / W-axis	mm	±0.005	

⁽¹⁾ : IN CASE OF HIGHER LOAD CAPACITY, IT WILL BE CHANGED.

Specifications are subject to change without prior notice.

5. GENERAL SPECIFICATION

ITEM		UNIT	SPECIFICATION	SELECTION
POWER UNIT	TANK CAPACITY	L	90	DEFAULT
	MOTOR CAPACITY	kW	3.7	
	OPERATING PRESSURE	Mpa	5.5	
	COOLING SYSTEM	-	RADIATOR TYPE	
	MAX. FLOWRATE	L/min	37.5	
LUBRICATION DEVICE	TANK CAPACITY	L	45	DEFAULT
	PUMP MOTOR POWER	kW	0.057 x 2 EA	
	DISCHARGE PRESSURE	Mpa	1.7	
	DISCHARGE VOLUME	L/min	0.15	
COMPRESSED AIR	PRESSURE	Mpa	0.54	DEFAULT
	CONSUMPTION	NL/min	520	
SPINDLE OIL COOLER	TANK CAPACITY	L	120	DEFAULT
	COOLING CAPABILITY	kW	10.5	
CHIP DISPOSAL (IN MACHINE TO TANK)	HINDED BELT	SET	0.4 kW	DEFAULT
ELECTRIC SOURCE	MAIN POWER	-	3Ph.-AC 220 V / 60 Hz	DEFAULT
	POWER CAPACITY	kVA	70	
FLOOR SPACE	LENGTH × WIDTH	mm	7,800 × 9,400	DEFAULT
MACHINE HEIGHT		mm	5,400	
MACHINE WEIGHT		kg	48,000	
MACHINE COLOR	-	DOOSAN INFRACORE NEW 4 TONE COLOR		STD.
	-	USER DEFINED MACHINE COLOR		OPT. SELECTIVE

6. STANDARD ACCESSORIES

ITEM	UNIT	SPECIFICATION	SELECTION
SLIDEWAY COVERS (X / Z-axis)	SET	1	DEFAULT
COLUMN GUIDEWAY COVER(Y-axis)	SET	1	
Y-axis CLAMP	SET	1	
W-axis CLAMP	SET	1	
SPINDLE ORIENTATION	SET	POSITION CODER	
PORTABLE MPG	SET	1	
MAIN OP. PANEL(2-LINKAGE TYPE)	SET	1	
ORERATOR'S CALL LAMP(RED / YELLOW / GREEN)	SET	1	
Z AXIS COOLANT PAN	SET	1	
TABLE CHIP PAN	SET	1	
WORK LIGHT (HALOGEN LAMP)	SET	1	
FOOT SWITCH FOR TOOL UNCLAMP	SET	1	
TOOL KIT	SET	1	
CUSTOMER'S MANUAL	SET	1	

<Note>

1. SPECIFICATION MARKED BY '(1)' SHOULD BE REVIEWED IN DETAIL BEFORE CONTRACT.
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7. ATC

ITEM	UNIT	SPECIFICATION	SELECTION
TOOL STORAGE CAPACITY	ea	40	OPT.
	ea	60	OPT.
	ea	90	OPT.
TOOL SHANK	-	MAS403 BT 50 / CT50 / DIN69871 A 50	OPT. SELECTIVE
PULL STUD	-	MAS403-P50T-1(45°)	OPT.
	-	CAT 50 (Modified BT Type)	OPT.
	-	DIN 69872 #50	OPT.
TOOL SELECTION TYPE	-	FIXED ADDRESS	DEFAULT
MAX. TOOL DIAMETER	mm	Φ130(CONT.), Φ250(ADJACENT BOTH-SIDE 1POT EMPTY)	STD. SELECTIVE
	mm	Φ600(ADJACENT BOTH-SIDE 2POT EMPTY)	OPT.
MAX. TOOL LENGTH	mm	600	DEFAULT
MAX. TOOL WEIGHT	kg	25	STD. SELECTIVE
	kg	30	OPT.
MAX. TOOL MOMENT	N·m	34.3	DEFAULT
ATC DRIVEN (MAGAZINE ROTATION & CARRIAGE MOVEMENT)	TYPE	SERVO MOTOR	
TOOL CHANGING TIME	T-T-T	sec.	
	C-T-C	sec.	
ATC SAFETY FENCE	SET	1	
ATC OP. PANEL	-	PORTABLE	

8. APC

ITEM	UNIT	SPECIFICATION	SELECTION
NUMBER OF PALLETS	ea	2	DEFAULT
APC TYPE	-	PARALLEL SHUTTLE (Z-DIRECTION)	
PALLET SIZE (WIDTH×LENGTH)	mm	1,600 × 1,600	
MAX. WORKPIECE WEIGHT	kg	7,500	
T-SLOT x NUMBERS	mm	22H8 x 9	
RAISING BLOCK	mm	250	

9. FEEDBACK SYSTEM

ITEM	UNIT	SPECIFICATION	SELECTION
LINEAR SCALE FEEDBACK SYSTEM	ABSOLUTE TYPE	SET X / Y / Z-axis	OPT. SELECTIVE

10. COOLANT SYSTEMS & CHIP DISPOSAL

ITEM	UNIT	SPECIFICATION	SELECTION
COOLANT SYSTEMS	COOLANT SYSTEM 680 L	SET	1.5 kW, 0.49 Mpa, 60 mesh, 30 L/min
	TSC 20 bar	SET	1
	COOLANT SPRAY GUN	SET	1
	HIGH CAPACITY TYPE COOLANT PUMP	SET	1
	OIL SKIMMER	SET	BELT TYPE
CHIP DISPOSAL (FROM COOLANT TANK TO CHIP BUCKET)	HINGED BELT	SET	0.4 kW
	MAGNETIC SCRAPER	SET	0.4 kW
CHIP BUCKET	L	360	OPT. SELECTIVE

11. SAFETY GUARD

ITEM	UNIT	SPECIFICATION	SELECTION
COOLANT SPLASH GUARD	SEMI TYPE	-	TABLE ON COVER W/O ROOF COVER
	SEMI TYPE	-	TABLE ON COVER W/H AUTO DOOR
SAFETY FENCES & INTERLOCK SWITCHES	-	ENCLOSE THE MACHINE WITH FENCES	OPT.

12. ADDITIONAL 6th AXIS

ITEM		UNIT	SPECIFICATION	SELECTION	
ADDITIONAL 6th AXIS ⁽¹⁾	PACKAGE #1	-	ONLY WIRING	OPT.	SELECTIVE
	PACKAGE #2	-	PACKAGE #1 + PIPING + AMP	OPT.	

13. PUEUMATIC

ITEM		UNIT	SPECIFICATION	SELECTION	
AIR	CHIP AIR BLOW	SET	1	OPT.	SELECTIVE
	AIR SPRAY GUN	SET	1	OPT.	
	MQL	SET	1	OPT.	
	AIR DRYER	SET	1	OPT.	
	AIR COMPRESSOR	SET	1	OPT.	

14. ATTACHMENT & FIXTURE

ITEM		UNIT	SPECIFICATION	SELECTION	
MANUAL TYPE	90° ANGLE HEAD	LENGTH	mm	365 (1,000 r/min)	OPT.
			mm	660 (1,000 r/min)	OPT.
	UNIVERSAL HEAD	LENGTH	mm	500 (1,500 r/min)	OPT.
	FACE PLATE	DIAMETER	mm	Ø650 (STROKE : 150)	OPT.
	SPINDLE SUPPORT	LENGTH	mm	310 (1,000 r/min)	OPT.
INDEXABLE ANGLE HEAD(90° INDEX)		LENGTH	mm	730 (1,000 r/min)	OPT. SELECTIVE
FACING HEAD ⁽¹⁾ (NC TYPE)	ATTACHMENT READY	MAKER	-	COGSDILL	OPT.
		MAKER	-	D'Andrea	OPT.
	NC CONTOURING HEAD	MAKER	-	COGSDILL	OPT.
		MAKER	-	D'Andrea	OPT.
FIXTURE	ANGLE PLATE	L × W × H	mm	450 × 600 × 400	OPT.
			mm	500 × 1,000 × 550	OPT.
			mm	750 × 1,250 × 750	OPT.
			mm	1,000 × 2,000 × 1,000	OPT.

15. MEASUREMENT

ITEM		UNIT	SPECIFICATION	SELECTION	
TOOL SETTING GUIDE	AUTO. TOOL LENGTH MEASUREMENT	SET	RENISHAW / TS27R	OPT.	SELECTIVE
WORK SETTING GUIDE	AUTO. WORKPIECE MEASUREMENT	SET	RENISHAW / TS27R	OPT.	SELECTIVE
TEST BAR		ea	ISO #50	OPT.	SELECTIVE

16. OTHERS

ITEM		UNIT	SPECIFICATION	SELECTION	
3-MPG	STAND TYPE	-	3-axes CONTROL (X,Y,Z)	OPT.	SELECTIVE
	PORTABLE TYPE	-	3-axes CONTROL (X,Y,Z)	OPT.	
RAISING BLOCK		mm	250	OPT.	SELECTIVE
SPINDLE THERMAL COMPENSATION SYSTEM(Z-axis)		SET	1	OPT.	SELECTIVE

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